

A12
a covering that is transparent to said radiation and which encapsulates said carrier.

Claim 6 has been amended as follows:

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6. (Amended) An illumination unit as claimed in claim 5 wherein each of said laser diodes is directly connected to one pin-like element via a respective bond wire for forming a p-contact, and wherein said carrier has an electrically conductive layer at a side of said carrier at which said laser diode array is mounted, said electrically conductive layer being connected to at least one of said pin-like terminal elements via a bond wire and forming an n-contact for said laser diode bar.

Cla 7
Claim 7 has been amended as follows:

7. (Amended) An illumination unit as claimed in claim 1 wherein said carrier has a laterally closed recess in which said laser diode bar and said optical arrangement are disposed, and wherein said covering comprises a flat element closing said recess.

Cla 11
Claim 11 has been amended as follows:

11. (Amended) An illumination unit as claimed in claim 1 wherein said laser diode bar and said optical arrangement are secured to said carrier with a glued connection.

Cla 14
Claim 14 has been amended as follows:

14. (Amended) An illumination unit as claimed in claim 1 wherein said optical arrangement is secured to said carrier with a glued connection and wherein said laser diode bar is secured to said carrier with a soldered connection.

Claim 16

Claim 16 has been amended as follows:

16. (Amended) An illumination unit as claimed in claim 15 wherein said covering is comprised of anti-reflection coated glass.

Claim 18

Claim 18 has been amended as follows:

18. (Amended) An illumination unit as claimed in claim 17 wherein said cooling element is disposed at said carrier at a region of said laser diode bar.

IN THE ABSTRACT

The Abstract has been amended as follows:

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Illumination unit for an apparatus, particularly for the implementation of diaphanoscopic examinations at a human, animal or botanical examination subject, has a monolithic semiconductor laser diode bar with driveable laser diodes that emit radiation as well as at least one optical arrangement for collimating and/or focusing the emitted laser radiation. The laser diode bar and the optical arrangement are mounted at a common carrier, and the laser diode bar is connected to pin-like terminal elements at the carrier for diode drive, that are in turn connected or connectable to terminals provided at a carrier plate accepting the carrier. A radiation-transparent covering that encapsulates the carrier.